

## State of Vermont Vermont Department of Education 120 State Street Montpelier, VT 05620-2501

From: Cathy Hilgendorf, School Construction Coordinator

To: School Superintendents, Principals, and Regional Technical Center Directors

**Subj:** Solar in Schools Initiative

Date: May 22, 2009

Upon completion of the award process through the US Department of Energy, the Vermont Department of Education is preparing to offer Vermont public schools the opportunity to compete to become one of eight to ten schools hosting solar power educational programs for students, staff, and community members. It is our intention to ultimately fund the installation of 5kW solar photovoltaic systems at school sites, and that these small-scale projects will be at the center of some exciting K-12 cross-discipline curriculum modules, teacher professional development, and workforce development initiatives.

Consistent with widespread interest in clean and renewable energy, this project will add a "green" component to school buildings, train people in solar power technology, and strengthen science curricula in alignment with Vermont's grade-level expectations and science standards. Ideally, the funds will be granted to teams of elementary schools, comprehensive high schools, and career and technical high schools collaborating to bring a K-12 continuum of educational opportunities to their communities.

## One possible example of a successful proposal:

Four teachers at Hypothetical High School (HHS) and three instructors from Model Technical Center construction, electrical, and engineering programs collaborate with a challenge for their students. Math and science students determine the amount of electricity that would be generated by installing solar panels on HHS and project the annual savings in both dollars and carbon emissions. Architecture and engineering students design the installation for optimum performance and ease of maintenance, including an interactive education center in the school lobby tied to the solar photovoltaic system with real-time metering. The company hired to install the system allows construction students to participate, other students put together a solar power curriculum module for an elementary school, and the local community access television station uses media and communications students to document the project. Outcomes: the school community has a renewable energy system and solar power has been demystified for dozens of tomorrow's citizens.

I'm sure many other creative models will be developed, and there will be more information about the competition at the start of the 2009/10 school year. However, it was important to get this notice to you during the present school year, so that collaborative planning can begin. Each competitive grant will be in the \$50,000 range, enough to cover only the physical solar installation in most cases, although **no** specific non-federal "match" contribution will be required. Most districts will need to seek out other partners in order to put together a strong proposal, such as the opportunities for professional development for instructors through Vermont Energy Education Program.



## **Target Timeframe:**

- April 2009 Senator Bernie Sanders notifies VT Department of Education (VT DOE) of federal budget earmark for Solar in Schools (This is not ARRA money).
- May 2009 VT DOE completes application with US Dept. of Energy (US DoEn).
- June through August 2009 US DoEn and VT DOE set up federal grant parameters. State of Vermont reviews and accepts terms of federal funds.

School District Curriculum Coordinators and administrators begin crafting a proposal to bring solar power and solar education to a broad base of students. 2009/10 curricula incorporates solar technology elements. Schools are encouraged to start professional development and curriculum enhancement in advance of the competition for construction funds.

- September/October 2009 VT DOE distributes grant details and federal requirements to school administrators and business managers.
- November/December 2009 Proposals due to VT DOE. Proposals will be reviewed and awards will be announced.

Maybe we'll call this initiative "Who Says There Isn't Enough Sunshine in Vermont For Solar?" Thanks.

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